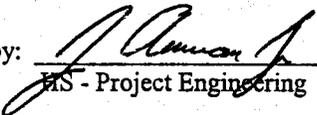
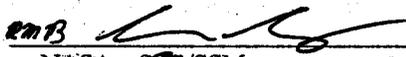


NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
SHEAR PLATE ASSEMBLY, ITEM 115 (PIVOTED, PLANAR) ----- SV778540-56 (1) OR (ORU) ----- SV824133-8 (1)	3/1RB	115FM12 Detent function inoperative.  Carriage spring relaxes or fractures.	END ITEM: Loss of primary latching mechanism which prevents translation of O2 actuator carriage and cam out of EVA position. Loss of spring force necessary to depress position switches OFF, IV, PRESS.  GFE INTERFACE: Loss of primary O2 actuator locking function for all positions. Loss of actuator position indication in OFF, IV, and PRESS positions.  MISSION: None for single failure.  CREW/VEHICLE: None for single failure. Possible loss of crewman with 1) additional loss of carriage lock in EVA position and associated translation of	A. Design - There are three springs in the actuator switch and handle assembly, fabricated of AMS 5688 (18-8 stainless steel) spring wire. Two are identical and are made from .022 dia wire. The third is made from .014 dia wire. All springs are capable of a cycle life of 10E+8 cycles or more.  B. Test - Component Acceptance Test - Proper detent function is verified during shear plate acceptance test per SEMU-60-010 in which the detent force must be 1.5-6.0 lbs.  PDA Test - Detent function is again verified during PLSS PDA per SEMU-60-010 in which the detent force must be 1.5-6.0 lbs.  Certification Test - Certified for a useful life of 20 years from the date of manufacture. Successful refurbishment will extend useful life to 30 years max. (Ref. EMUM1-0491, EMUM1-0027).  C. Inspection - Details are 100% inspected per drawing dimensions and surface finish characteristics. Details are manufactured from material with certified physical and chemical properties.  D. Failure History - None.  E. Ground Turnaround - Tested for non-EET processing per FEMU-R-001, O2 Actuator Position Switch Check. None for EET processing.  F. Operational Use - Crew Response - PreEVA: Trouble shoot problem, if no success use spare EMU if available otherwise continue EVA prep. EMU is go for EVA. Perform leak checks manually. EVA: Problem not detectable. No response for single failure. Training - No training specifically covers this failure mode.  Operational Considerations - EVA checklist procedures verify hardware integrity and systems operational status prior to EVA. Flight rules define go/no go criteria related to EMU pressure regulation.

NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
		115FM12	actuator carriage out of EVA position; 2) failed "ON" EVA switch Item 116 (indicates SOP still "ON"), and 3) failure of pressurization ventilation, cooling or CO2 control components.  TIME TO EFFECT /ACTIONS: Hours.  TIME AVAILABLE: Minutes.  TIME REQUIRED: Immediate.  REDUNDANCY SCREENS: A-PASS B-FAIL C-PASS	

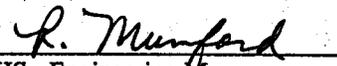
EXTRAVEHICULAR MOBILITY UNIT  
SYSTEMS SAFETY REVIEW PANEL REVIEW  
FOR THE  
I-115 SHEAR PLATE ASSEMBLY  
CRITICAL ITEM LIST (CIL)  
EMU CONTRACT NO. NAS 9-97150

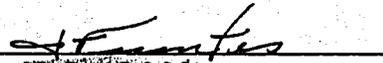
Prepared by:   
HS - Project Engineering

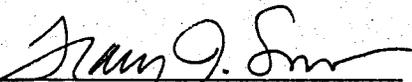
Approved by:   
NASA - ~~SSA/SSM~~  
LSS

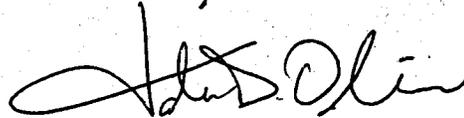
  
HS - Reliability

  
NASA - ~~EM/SSM~~

  
HS - Engineering Manager

  
NASA - S & MA

  
NASA - MOD

  
NASA - Crew

  
NASA - Program Manager